Research to Practice Brief

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Collaborative Strategic Reading (CSR): Improving Secondary Students' Reading Comprehension Skills

By Christine D. Bremer, Sharon Vaughn, Ann T. Clapper, and Ae-Hwa Kim

The Problem

Reading comprehension is a critical skill for secondary students with disabilities, as it facilitates participation in mainstream content-area classes. Unfortunately, many secondary educators are not adequately equipped to provide reading instruction. This Brief introduces a research-based practice, Collaborative Strategic Reading (CSR), developed by Janette K. Klingner and Sharon Vaughn (1996, 1998).

Overview of CSR

CSR is a reading comprehension practice that combines two instructional elements: (a) modified reciprocal teaching (Palincsar & Brown, 1984), and (b) cooperative learning (Johnson & Johnson, 1987) or student pairing. In reciprocal teaching, teachers and students take turns leading a dialogue concerning key features of text through summarizing, questioning, clarifying, and predicting. Reciprocal teaching was developed with the intention of aiding students having difficulty with reading comprehension. Palincsar and Brown found that seventh graders with poor reading comprehension skills achieved sizable gains through use of the reciprocal teaching method. More recent studies using reciprocal teaching have found it to be effective with struggling middle school and high school readers (Alfassi, 1998; Lysynchuk, Pressley, & Vye, 1990). Klingner and Vaughn (1996) originally designed CSR by combining modified reciprocal teaching with cooperative learning. Through a number of research trials, CSR has been refined and currently consists of four comprehension strategies that students apply before, during, and after reading in small cooperative groups. These reading strategies are: (a) preview (before reading), (b) click and clunk (during reading), (c) get the gist (during reading), and (d) wrap up (after reading).

Research on CSR

The effects of CSR on reading comprehension for students with learning disabilities, including secondary students with learning disabilities, have been examined in a series of intervention studies by Vaughn, Klingner, and their colleagues. Most intervention studies demonstrated that CSR was associated with improved reading comprehension for students with learning disabilities. The first study using CSR was conducted with 26 seventh- and eighth-graders with learning disabilities who used English as a second language. In this study, students learned to use modified reciprocal teaching methods in cooperative learning groups (i.e., brainstorm, predict, clarify words and phrases, highlight the main idea, summarize the main idea(s) and important detail, and ask and answer questions). CSR was effective in improving reading comprehension of most of students with learning disabilities (Klingner & Vaughn, 1996).

CSR has also been combined with other approaches to address the range of skills needed for reading competence in middle school and high school. In a study of 60 sixth-grade middle school students with varied reading levels in inclusive classrooms, a multicomponent reading intervention was used to address to the range of reading needs (Bryant et al., 2000). CSR was used in conjunction with two other research-based strategies: Word Identification (Lenz, Schumaker, Deshler, & Beals, 1984), and Partner Reading (Mathes, Fuchs, Fuchs, Henley, & Sanders, 1994). Results revealed that students with learning disabilities significantly improved their word identification and fluency, but not reading comprehension.

The effectiveness of CSR with elementary students with learning disabilities has also been supported. Klingner, Vaughn, and Schumm (1998) implemented CSR with fourth graders with a wide range of reading levels. Students in the CSR group significantly outperformed those in the control group on comprehension. In a subsequent study, fifth-grade students were taught to apply CSR by trained classroom teachers during English as a Second Language (ESL) science classes (Klingner & Vaughn, 2000). Students significantly increased their vocabulary from pre- to post-testing. Furthermore, students in CSR groups spent greater

amounts of time engaged in academic-related strategic discussion and assisted one another while using CSR. CSR has also been implemented in conjunction with other research-based reading strategies (writing process approach, classwide peer tutoring, making words) for elementary students with learning disabilities (Klingner, Vaughn, Hughes, Schumm, & Elbaum, 1998). In this study, trained teachers implemented CSR with their students. The results also confirmed that use of CSR has resulted in improvement in reading for elementary students with learning disabilities.

Implementation of CSR

CSR can be implemented in two phases: (a) teaching the strategies, and (b) cooperative learning group activity or student pairing. The implementation steps described below were developed through a series of research studies (Bryant et al., 2000; Klingner & Vaughn, 1998, 1999; Vaughn et al., 2000; Vaughn, Klingner, & Bryant, 2001).

Phase 1. Teaching the Strategies

Students learn four strategies: preview, click and clunk, get the gist, and wrap up. Preview is used before reading the entire text for the lesson, and wrap up is used after reading the entire text for the lesson. The other two strategies, click and clunk and get the gist, are used multiple times while reading the text, after each paragraph.

Preview. Preview is a strategy to activate students' prior knowledge, to facilitate their predictions about what they will read, and to generate interest. Preview consists of two activities: (a) brainstorming and (b) making predictions.

A teacher introduces previewing to students by asking them to think about the previews they have seen at the movies. The teacher prompts students to tell what they learn from previews by asking questions such as, "do you learn who is going to be in the movie?" or "do you learn in what historical period the movie will take place?" Then the teacher asks them to skim information such as headings, pictures, and words that are bolded or underlined to determine (a) what they know about the topic and (b) what they think they will learn by reading the text.

Click and Clunk. Click and clunk is a strategy that teaches students to monitor their understanding during reading, and to use fix-up strategies when they realize their failure to understand text. The teacher describes a click as something that "you really get. You know it just clicks." After students understand, the teacher explains a clunk: "A clunk is like when you run into a brick wall. You just really don't understand a word the author is using. That's a clunk." Then, the teacher reads a short piece aloud and asks students to listen carefully for clunks. The teacher asks students to write down their clunks and then teaches fix-up strategies to figure out the clunks. The teacher can use "clunk cards" (see Materials for detailed description) as reminders of fix-up strategies.

Get the gist. Get the gist is a strategy to help students identify main ideas during reading. One way to identify the main idea is to answer the following questions: (a) "who or what is it about?" and (b) "what is most important about the who or what?" In addition, students are taught to limit their response to ten words or less, so that their gist conveys the most important idea(s), but not unnecessary details.

Get the gist can be taught by focusing on one paragraph at a time. While students read the paragraph, the teacher asks them to identify the most important person, place, or thing. Then the teacher asks students to tell what is most important about the person, place, or thing. Finally, the teacher teaches students to put it all together in a sentence containing ten words or less.

Wrap up. Wrap up is a strategy that teaches students to generate questions and to review important ideas in the text they have read. Wrap up consists of two activities: (a) generating questions, and (b) reviewing.

Practitioner Perspectives

Marty Hougen, Ph.D., is the supervisor of dyslexia services for the Austin Independent School District in Austin, TX. She agreed to be interviewed on her experiences with CSR.

On getting started . . .

We started with a team of sixth-grade teachers teaching English, ESL, Special Education, Math, Social Studies, and Science. The next year we trained the seventh-grade teachers so that students would have the opportunity to use the same strategy again.

On the need for teacher support . . .

We found that the teachers needed a great deal of support to begin to use the strategy. We met with them weekly, at the beginning, and then biweekly after that. We also modeled lessons in their classrooms and had problem-solving sessions with individual teachers.

On what works . . .

Most of our content-area teachers have had very little training in how to teach reading. So, they go to a workshop and get dozens of prereading strategies, some during-reading strategies, and all these wonderful things to do after the students read. Then they get back to their classrooms and they're so overwhelmed that they don't use any of the strategies or they use a different one every day and the students don't see any consistency. CSR gives teachers just a couple of prereading strategies, a couple of during-reading strategies and a couple of after-reading strategies so that students use the same strategies every time they read. The students use the same strategies over and over. They internalize the strategies, generalize use of the strategies to other classes, and become more active, independent readers. That's what works.

On what administrators can do . . .

The principal has to actively support the teachers by seeing that they get the training and actually use the strategies. When I say actively support, I mean publicly too— at parent meetings, school board meetings, faculty meetings, and assemblies for students. Our administration kept saying: "This is what we're going to do and we're going to support you while you're learning to do this."

On what teachers say . . .

At first one of our teachers said, "If these kids can't read by the time they're in seventh grade then forget it. I'm a science teacher not a reading teacher." And now, after using CSR, he introduces himself as a reading teacher who also teaches science!

A teacher initially teaches students to wrap up by telling students to pretend they are teachers and to think of questions they would ask on a test. The teacher suggests the following question starters: who, what, when, where, why, and how. The teacher also encourages students to generate some questions that require an answer involving higher-lever thinking skills, rather than literal recall. Finally, the teacher asks students to write down the most important ideas from the day's reading assignment.

Phase 2. Cooperative Learning Group or Student Pairing

Once students have learned the four strategies (preview, click and clunk, get the gist, and wrap up) and have developed proficiency applying them in teacher-led activities, they are ready to apply CSR in their peer-led cooperative learning groups. Some teachers find it easier to have students work in pairs and that has also proven to be a successful practice. Procedures for using in groups are outlined below.

Set the stage. First, the teacher assigns students to groups. Each group should include about four students of varying ability. Then, the teacher assigns roles to students. Roles should rotate on a regular basis so that students can experience a variety of roles. Possible roles include the following:

- 1. *Leader*: Tells the group what to read next and what strategy to use next.
- 2. *Clunk Expert*: Uses clunk cards to remind the group of the steps to follow when trying to figure out the meaning of their clunk(s).
- 3. *Gist Expert*: Guides the group toward getting the gist and determines that the gist contains the most important idea(s) but no unnecessary details.
- 4. *Announcer*: Calls on group members to read a passage or share an idea.

Materials. The following materials may be helpful as a teacher assists students to use CSR and cooperative learning techniques (Klingner, Vaughn, Dimino, Schumm, & Bryant, 2001).

1. Reading materials. When selecting reading materials for CSR, the following factors are recommended for consideration: (a) reading materials at students' instructional level, which generally refers to students being able to decode about 80% of the words correctly, (b) reading

- materials having themes and supporting details, (c) reading materials consisting of several paragraphs, and (d) reading materials containing clues/pictures for predicting (Texas Center for Reading and Language Arts, 2000).
- 2. Clunk cards. Each of the four clunk cards contains one fix-up strategy. Fix-up strategies included in the clunk cards are: (a) reread the sentence with the clunk and look for key ideas to help you figure out the word think about what makes sense, (b) reread the sentences before and after the clunk looking for clues, (c) look for a prefix or suffix in the word that might help, and (d) break the word apart and look for smaller words that you know.
- 3. *Cue cards*. Cue cards outline the procedures to be followed in a cooperative learning group. They remind students of each step of CSR for each role. Each role comes with a corresponding cue card that explains the steps to be followed to fulfill that role (see **Figure 1** for a sample cue card for a CSR leader).
- 4. Learning log. CSR learning logs serve two roles: (a) written documentation of learning, assuring the individual accountability that facilitates cooperative learning, and (b) study guides for students (see Figure 2 for a sample CSR learning log).
- 5. *Timer (optional)*. Timers that students set by themselves can help groups to remain on task.
- 6. *Score card (optional)*. The scorekeeper in a group follows a cue card to find out when to award points, and records these points on a score card.

Process. The basic steps to apply CSR in a cooperative learning group are as follows:

- Step 1: Whole class introduction. The teacher introduces the topic, teaches key vocabulary, and provides instructions.
- Step 2: Cooperative group activity during preview, click and clunk, get the gist, and wrap up). Each group member plays an assigned role and fills out a CSR learning log during the activity.
- Step 3: Whole class wrap up strategy. A teacher discusses the day's reading passage, reviews clunks, answers questions, or shares some review ideas.

Figure 1: CSR Leader's Cue Card

Before Reading	During Reading	After Reading
Preview Today's topic is Let's brainstorm everything we already know about the topic and write it on your learning logs. Who would like to share their best ideas? Now let's predict. Look at the title, pictures, and headings and think about what you think we will learn today. Write your ideas in your learning logs. Who would like to share their best ideas?	Read Who would like to read the next section? Click and Clunk Did everyone understand what we read? If you did not, write your clunks in your learning logs. [If someone has a clunk] Clunk Expert, please help us out. Get the Gist It's time to Get the Gist. Gist Expert, please help us out. Go back and repeat all of the steps in this column over for each section that is read.	Wrap up Now let's generate some questions to check if we really understood what we read. Remember to start your questions with who, when, what, where, why, or how. Everyone, write your questions in your learning logs. Who would like to share their best question? In your learning logs, let's write down as much as we can about what we learned today. Let's go around the group and each share something we learned. Compliments and Suggestions The Encourager has been watching carefully and will now tell us two things we did really well as a group today. Is there anything that would help us do even better next time?

Adapted from Texas Center for Reading and Language Arts. (2000). *Professional development guide: Enhancing reading comprehension for secondary students-part II*. Austin, TX: Texas Center for Reading and Language Arts.

Figure 2: CSR Learning Log

Name:	Date:
Brainstorm: What do you already know about this topic?	Predict: What do you think you will learn by reading this passage?
Clunks: Please list your Clunks.	
The Gist (main idea): Write the Gist of the section	you read.
Make questions: Make questions about main ideas.	Review: Write something important they learned.

Adapted from Texas Center for Reading and Language Arts. (2000). *Professional development guide: Enhancing reading comprehension for secondary students-part II.* Austin, TX: Texas Center for Reading and Language Arts. For use in the classroom, this figure should be expanded to fill an entire page.

Role of the teacher. During the cooperative group activity, the teacher's role is to circulate among the groups, clarifying clunks, modeling strategy usage, modeling cooperative learning techniques, redirecting students to remain on-task, and providing assistance.

Conclusion

Collaborative Strategic Reading is an approach that works well in mixed-ability classrooms and helps students improve their reading comprehension. CSR can be implemented in a subject-area classroom, such as science or social studies, to improve student comprehension of expository text. It takes time to teach the CSR strategies, but students benefit by developing skills enabling them to better understand the material in their reading assignments. An additional benefit is the development of skills related to working in groups.

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Resources

Enhancing Reading Fluency and Reading Comprehension for Secondary Students - Parts I & II

http://www.texasreading.org/tcrla/publications/second-ary/secondary_fluency.htm

These CSR professional development manuals (in pdf format) explain CSR implementation in detail. Part II addresses implementing CSR with students in special education.

From clunk to click: Collaborative Strategic Reading

Klingner, J. K., Vaughn, S., Dimino, J., Schumm, J. S., & Bryant, D. (2001). Longmont, CO: Sopris West. This book includes lesson plans for the CSR strategies, ideas for whole-class activities, and reproducible materials. The final chapter focuses on using CSR with secondary students.



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National Center on Secondary Education and Transition

Institute on Community Integration (UAP), University of Minnesota, 6 Pattee Hall, 150 Pillsbury Dr. SE, Minneapolis, MN 55455

Tel: 612.624.2097; Fax: 612.624.9344;

Web: http://www.ncset.org;

E-mail: ncset@icimail.coled.umn.edu

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